Queries to the Author

Chapter Number: 8

Chapter Title: Assessing Effects through Laboratory Toxicity Testing

| Query | Description | Author's Response |
|-------|--|---|
| 1. | SECTION: 8.8 SUBLETHAL EFFECTS AND TEST DEVELOPMENTS AUTHOR: Please check the sentence "Only when the linkage () goals be understood) for clarity. | The current sentence is OK, but perhaps can be improved by rewording to read "A sublethal effect at the individual level is only relevant to protection goals when it can be linked to a resulting effect at the colony level." |
| 2. | SECTION:REFERENCES AUTHOR: The following URLs are not accessible. Please check. • "http://ecfr.gpoaccess.gov/cgi/t/text/tex tidx?c=ecfr&sid=e2fa3dd8d45333c0c4 427f3d556c30f9&tpl=/ecfrbrowse/Title 40/40cfr158_main_02.tpl. • http://www.oecd-ilibrary.org/docserver/download/fulltex t/9721401e.pdf?expires=1333215085& id=id&accname=freeContent&checksu m=39EF34D70EBB775A1FAE80D4F A4953EB • http://www.oecd-ilibrary.org/docserver/download/fulltex t/9721301e.pdf?expires=1333215348& id=id&accname=freeContent&checksu m=959BEB86B48777CDD914B00E36 AA67F0 | These links did not work for me either |

| 3. | SECTION: REFERENCES | |
|----|--|----------------------------------|
| | AUTHOR: Please provide the last accessed date for the following URLs: | |
| | http://eur- lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2009:309:0001:0050:EN: PDF | Was able to access 21Jan2014 |
| | • http://www.uksup.sk/download/oso/20 030409_smernica_rady_91_414_eec.pd f | Was able to access 21Jan2014 |
| | • http://www.oecd- ilibrary.org/docserver/download/fulltex t/9721401e.pdf?expires=1333215085& id=id&accname=freeContent&checksu m=39EF34D70EBB775A1FAE80D4F A4953EB | Was not able to access 21Jan2014 |
| | • http://www.oecd- ilibrary.org/docserver/download/fulltex t/9721301e.pdf?expires=1333215348& id=id&accname=freeContent&checksu m=959BEB86B48777CDD914B00E36 AA67F0 | Was not able to access 21Jan2014 |
| | • http://www.regulations.gov/#!documen tDetail;D=EPA-HQ-OPPT-2009-0154-0016 | Was able to access 21Jan2014 |
| | http://ec.europa.eu/food/plant/protectio n/evaluation/guidance/wrkdoc09_en.pd f | Was able to access 21Jan2014 |
| | http://www.regulations.gov/#!documen tDetail;D=EPA-HQ-OPPT-2009-0154- 0017 | Was able to access 21Jan2014 |
| | http://www.regulations.gov/#!documen tDetail;D=EPA-HQ-OPPT-2009-0154- 0018 | Was able to access 21Jan2014 |

4. SECTION: REFERENCES

AUTHOR: Please provide the complete list of authors (and other information, if any) for the following references:

- "Johansen C. et al. 1977. *Bee Research Investigations*. Dept. of Entomology, Washington State University, unpublished, p. 22."
- "Lagier RF. et al. 1974. Adjuvants

 Decrease Insecticide Hazard to Honey

 Bees. College of Agriculture Research

 Center, Washington State University

 Bulletin 801, 7 pp"

Have not been able to obtain a hard copy of Johansen, C. et al. 1977. Bee Research Investigations. Dept. of Entomology, Washington State University, unpublished, pp. 22. One of the coauthors was D. Mayer, but the others are unknown. The two authors are Johansen and Mayer.

- (... The EPA library has a copy of this publication but it is no longer in print)
- R. F. Lagier, C. A. Johansen, M. G. Kleinschmidt, L. I. Butler, L. M. McDonough and D. S. Jackson.

5. SECTION: GLOBAL

AUTHOR: The complete list of headings as appearing in the chapter is given below. Please check whether they have been given as intended. The highlight headings are 'level 2' in the chapter but 'level 1' in the TOC.

8.1 INTRODUCTION

8.2 OVERVIEW OF LABORATORY TESTING REQUIREMENTS AMONG SEVERAL COUNTRIES

8.2.1 OVERVIEW OF HONEY BEE LABORATORY TESTING IN THE EUROPEAN UNION

> 8.2.2 OVERVIEW OF HONEY BEE LABORATORY TESTING FOR REGULATORY PURPOSES IN NORTH AMERICA

8.3 UNCERTAINTIES IN CURRENT TESTING PARADIGMS

8.4 LIMITATIONS AND SUGGESTED IMPROVEMENTS FOR TIER 1 TESTING 8.4.1 ADULT APIS MELLIFERA The headings are OK

WORKER ACUTE TOXICITY

8.5 ADULT ORAL CHRONIC TOXICITY – APIS BEES

8.6 HONEY BEE BROOD TESTS IN THE LABORATORY

8.7 ADULT TOXICITY TESTING WITH NON-APIS BEES

8.7.1 NON-APIS BEE TESTING METHODS 8.7.2 NON-APIS LARVAL TESTING

8.8 SUBLETHAL EFFECTS AND TEST DEVELOPMENTS

8.8.1 PROBOSCIS EXTENSION
RESPONSE (PER) IN
LABORATORY
8.8.2 ARTIFICIAL FLOWERS IN
SEMI-FIELD CAGE
8.8.3 VISUAL LEARNING
PERFORMANCE IN A MAZE
8.8.4 RFID TAGGED BEES TO
MEASURE FORAGING BEHAVIOR

8.9 CONCLUSIONS

6. SECTION: GLOBAL

AUTHOR: Please provide the reference details for the following citations.

- 1. Johansen et al. (1997)
- 2. Menzel et al. (1974)
- 3. Johansen et al., 1986
- 4. Gough et al, 1994

Johansen et al. (1997) is actually "Johansen et. al. (1977)"

Menzel et al. 1974:

Menzel R., Erber J., Masuhr T., (1974) Learning and memory in the honeybee. *Experimental Analysis of Insect Behaviour* (Barton-Browne L, ed) Springer, Berlin, 195-217.

Johansen et al., 1986:

This citation should be "Johansen et. al. 1983"

The reference for this citation is: Johansen CA, Mayer DF, Eves JD,

and Kious CW, 1983. Pesticides and bees. Environmental Entomology 12, 1513-1518.

Gough et al 1994:

Reference for this citation is: Gough H.J., McIndoe E.C., Lewis GlB., 1994. The use of dimethoate as a reference compound in laboratory acute toxicity tests on honey bees (Apis mellifera L.) 1981-1992. J. Apic. Res., 33 (2) 119-125.

7. SECTION: GLOBAL

AUTHOR: The following references have not been cited in the text. Please check.

- 1. Alix et al. (2009)
- 2. Decourtye et al. (2005)
- 3. EC No 1107/2009
- 4. EPPO. 2010. PP 3/10 (3): Chapter 10
- 5. EU Directive 91/414
- 6. Johansen et al. (1977)
- 7. OECD. 2007
- 8. SANCO/10329/rev 2 final, 2002

Alix et al. 2009:

Please keep this reference, it is cited in the section entitled "Overview of Honey Bee Laboratory Testing in the European Union"

Decourtye et al. 2005: This reference can be deleted

EC No. 1107/2009; EPPO 2010; and EU Directive 91/414.

Please keep these reference.. it is cited in the opening sentences of the section entitled "Overview of Honey Bee Laboratory Testing in the European Union"

Johansen et al. 1997:

Please keep this reference, it should now be corrected in the text as a citation for Johansen et al 1977.

OECD 2007; and SANCO/10329...

Please keep these references, as they are cited in the section entitled "Overview of Honey Bee Laboratory Testing in the

| | | European Union" |
|-----|---|---|
| | | European Omon |
| 8. | SECTION: 8.2.2 OVERVIEW OF HONEY BEE LABORATORY TESTING FOR REGULATORY PURPOSES IN NORTH AMERICA AUTHOR: The abbreviations USEPA and | Expanded names are correct |
| | PMRA have been expanded as United States Environmental Protection Agency and Pest Management Regulatory Agency. Please check and confirm. | |
| 9. | SECTION: OVERVIEW OF HONEY BEE LABORATORY TESTING FOR REGULATORY PURPOSES IN NORTH AMERICA | 1977 is correct |
| | AUTHOR: Please check whether the citation "Johansen et al. (1997)" can be changed to "Johansen et al. (1977)" as per the reference list. If otherwise, please provide in-text citations for "Johansen et al. (1997)". | |
| 10. | SECTION: OVERVIEW OF HONEY BEE LABORATORY TESTING FOR REGULATORY PURPOSES IN NORTH AMERICA | For the missing footnote "10" please use the following reference: |
| | AUTHOR: The footnote "1" is not explained in the text. Please check. | USEPA 1996c. Ecological Effects Test Guidelines OPPTS 850.3040. Field Testing for Pollinators. EPA 712-C-96-150. [HYPERLINK "http://www.epa.gov/ocspp/pubs/ frs/publications/OPPTS_Harmon ized/850_Ecolgical_Effects_Test _Guidelines/Drafts/850- 3040.pdf"]. |
| 11. | SECTION: HONEY BEE BROOD TESTS IN THE LABORATORY | Ok |
| | AUTHOR: Wittmann (1982) has been changed to Wittmann (1981) as per the | |

| reference list. Please check. | |
|-------------------------------|--|
| | |